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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/802,901

03/16/2004

Yung-Lin Lin

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06/09/2006

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EXAMINER

A, MINH D

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 06/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Applicati n N .

10/802,901

Applicant(s)

LIN ET AL.

Examin r

Minh D. A

Art Unit

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-- The MAILING DATE of this c mmunication appears on the cover sheet with the correspondenc address --

### Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 57-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 57-60 and 62-68 is/are rejected.
- 7) ☒ Claim(s) 61 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/5/05, 3/16/06.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

***DETAILED ACTION***

1. This is a response to the Applicant's filing on 3/16/06. In virtue of this filing, claims 57-68 are currently presented in the instant applicant.

Applicant's communication filed on 3/28/2005 has been carefully considered by the examiner. The arguments advanced therein are persuasive with respect to the rejection of record, and those rejection are accordingly withdrawn. In view of a further consideration, however, a new rejection is set forth below. This action is not made final.

***Inventorship***

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 57-59, 62-66 rejected under 35 U.S.C. 102(e) as being anticipated by Sugita et al (US 2001/0052827).

Regarding claim 57, Sugita discloses a mutli-channel pulse width modulation and down counter comprising a PWM generator(281-282) for generating a plurality of phase-shifted burst mode signals, and CPU for regulating power to a plurality of loads using respective said phase shifted burst mode signals. See figures 5-7, col.7, lines [0118] to col.10, lines [0153].

Regarding claim 58, Sugita discloses a generator (281-282) for generating a PWM signal and wherein power delivered to each respective load determined by the pulse width of said PWM signal. See figures 5-7.

Regarding claim 59, Sugita discloses (PWM generator and CPU) for determining a frequency of at least one of said phase-shifted burst mode signals based on a frequency selection signal. See figures 5-7.

Regarding claim 62, Sugita discloses CPU for turning power to at least one load on and off based on, at least in part, the state of a respective phase-shifted burst mode signal. See figures 5-7.

Regarding claim 63, Sugita discloses an integrated circuit capable of generating a plurality of phase-shifted burst mode signals, said integrated circuit further capable of regulating power to a plurality of loads using respective said phase shifted burst mode signals. See figures 5-7, col.7, lines [0118] to col.10, lines [0153].

Regarding claim 64, Sugita discloses a modulator circuitry and phased delay array circuitry, said modulator circuitry is capable of generating a PWM signal having a pulse width, said phased delay array circuitry is capable of receiving said PWM signal and setting a pulse width of at least one said phase-shifted burst mode signal based on the pulse width of said PWM signal. See abstract and figures 5-7, col.7, lines [0118] to col.10, lines [0153].

Regarding claim 65, Sugita discloses the CPU for selecting and for receiving a reference signal and generating a frequency selection signal based on said reference signal, wherein said phased delay array circuitry (shift oscillation) is further capable of receiving the frequency selection signal and setting the frequency of said phase-shifted burst mode signals based at least in part on said frequency selection signal. See figures 5-7, col.7, lines [0118] to col.10, lines [0153].

Regarding claim 66, Sugita discloses a phase array driver circuitry capable of receiving said plurality of phase-shifted burst mode signals and generating at least one power regulating signal for each respective load. See figures 5-7.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 60, 67-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Sugita et al (US 2001/0052827).

Regarding claims 60, 67-68, Sugita discloses the claimed invention but does not explicitly disclose that the usages an plurality of CCFI for LCD.

. It would have been an obvious matter of design choice to employ Sugitas in any desired interest environment, display system....etc in order to maximize the usage of his invention, since applicant does not disclose that, all of these limitations can solve any stated problem and for any particular purpose. Therefore, it appears that the invention would not provide any improvement but merely apply the invention in different presentation.

***Allowable Subject Matter***

7. Claim 61 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Prior art does not teach that, a pair of transformer oscillators for generating a plurality of AC signals based at least in part on a respective phase-shifted burst mode signal; and supplying respective AC signals to respective loads recited in dependent claim 61.

***Citation of rel vant prior art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mader et al (US 6,469,454) and Sattler et al. (US 6,904,112) are cited to show a cold cathode fluorescent lamp controller.

### ***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 AM-2:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Examiner

Minh A

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5/23/06

*Shih-Chao Chen*  
SHIH-CHAO CHEN  
PRIMARY EXAMINER